

Title- Surgical management of prosthetic heart valve thrombosis- a single tertiary care centre  
10 years' experience

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Objectives- Prosthetic heart valve thrombosis(PHVT) has been one of the most dreaded complications of mechanical valve replacement despite the advancements and introduction of newer valves. It continues to be a major cause of morbidity and an important decision-making factor whenever a patient is evaluated for valve replacement. The purpose of this report is to present the surgical management and outcome of patients with PHVT at a single tertiary care centre over a period of 10 years.

Methods- After ethical committee approval, retrospective data was obtained for patients operated for PHVT between year 2012 January and December 2021. Out of total 158 cases complete data could be obtained for 119 patients only. Presentation, clinical history, operative notes and postoperative outcome was noted, Echocardiography and Cineflourosocopy records were relied for the diagnosis. Categorical variables were analysed by Chi-Square test. Continuous variables were expressed as mean +/- standard deviation (SD) and analysed by Student t-test. Mean age of study population was 34.41+/-12.85 years, and 44.53% patients were non-compliant to anticoagulation Average duration from primary surgery was 7.12 years+/-5.56 years. 83.1% patients had this 1st episode of PHVT while it was recurrent for 4.2% of study population. 22(18.48%) patients had presented in shock and required inotropic support

Result- Emergency surgery was undertaken in 14(11.76%) patients and in rest of the patients after initial management, elective surgery was undertaken. Of the 119 patients,61 patients underwent thrombectomy, while redo valve replacement was performed in 56 patients. No difference in outcome and mortality seen between the two groups. Most common post-operative complication was pleural effusion and a total of 14(11.76%) deaths were recorded,seen significantly higher in patients presenting with cardiogenic shock and 9 of them had undergone emergency surgery.

Conclusion- At present times the outcome related to reoperations for PHVT are quite safe and effective with poorer outcomes only in patients presenting with cardiogenic shock. Difference in outcome not seen whether thrombectomy or valve replacement undertaken, and remains a subject for further study to know the preferred surgical management.